

FCC Update

Federal Communications Commission
Office of Engineering and Technology
May 17, 2012

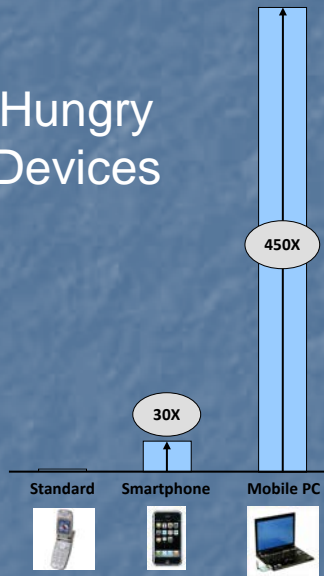
What is new ?

- Two new Commissioners make full Commission
 - Ajit Pai and Jessica Rosenworcel sworn in earlier this week
 - Both have strong telecomm background and have worked with FCC in prior administrations

What is not so new?

Wireless Broadband Spectrum is Still in Demand

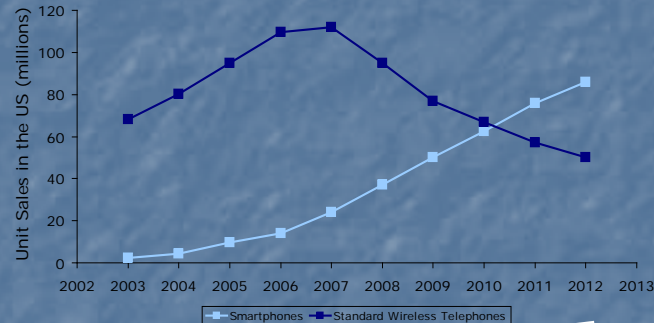
Hungry Devices



Source: Cisco

Smartphone sales to overtake standard phones by 2011

Source: TIA, Wilkofsky Gruen Associates from "TIA's 2009 ICT Market Review and Forecast".



Consumer Apps



National Purposes



Civic Engagement



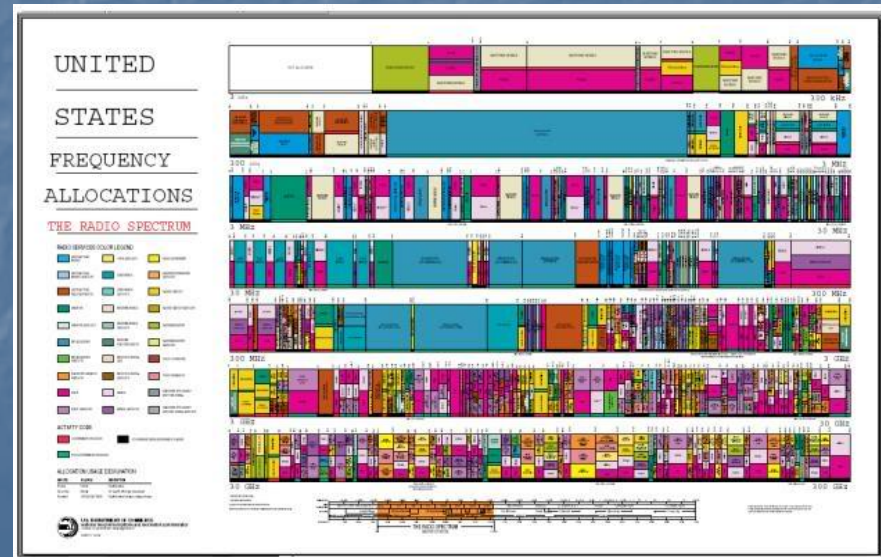
Public Safety



Telemedicine

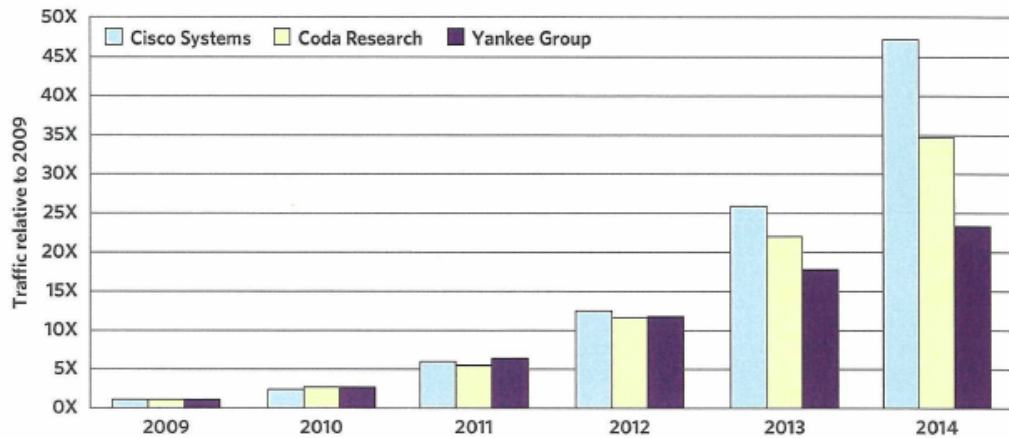


Smart Grid

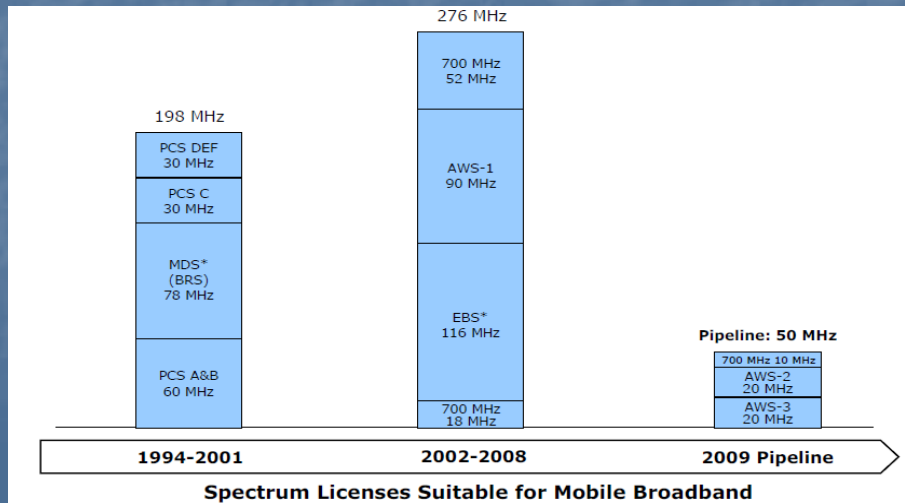


Wireless Broadband Spectrum Supply

Forecasted mobile data traffic in North America



Mobile broadband spectrum pipeline



Need to transform spectrum policy to meet wireless broadband demands

*In 2004 MDS/ITFS was rebanded to create the EBS/BRS band

National Broadband Plan

The image shows the front cover of the report titled 'Connecting America: The National Broadband Plan'. The cover is white with the title in red and black text. The text is centered and reads: 'CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN'.

CONNECTING
AMERICA:
THE NATIONAL
BROADBAND PLAN

- Released March, 2010
- Chapter 5 devoted to Spectrum
- Recommends Identifying 500 megahertz of spectrum newly available for broadband use within the next ten years
 - 300 megahertz between 225 MHz and 3.7 gigahertz (GHz) for mobile use within five years

Mobile Broadband Spectrum Identified by NBP

- WCS (2.3 GHz)
- MSS (1.5/1.6 GHz; 1.6/2.4 GHz; 2 GHz)
- AWS 2 (H, J) /3 (1.9 GHz and 2.1 GHz)
- D-Block (700 MHz)
- Broadcast TV (470-700 MHz)

Presidential Memo

- President issued Executive Memo on June 28, 2010
 - NTIA to collaborate with the FCC to make available 500 MHz of Federal and nonfederal spectrum over next 10 years, for mobile and fixed wireless broadband
 - Spectrum to be licensed by FCC for exclusive use or made available for shared access by commercial and Government users, to enable licensed or unlicensed wireless broadband technologies to be deployed

Broadband Spectrum Bands Identified/Studied

- 1675-1710 MHz
- 3500-3650 MHz
- 1755-1850 MHz
- 4200-4220 MHz, 4380-4400 MHz
- 5350-5470 /5850-5925 MHz

Commission Actions

- May 2010: WCS Order adopts rules for mobile broadband in 2.3 GHz spectrum
 - Reconsideration Order pending
- July 2010: NPRM to add provide for greater terrestrial mobile use of MSS spectrum (1.5/1.6 GHz, 1.6/2.4 GHz, and 2 GHz);
 - 2GHz fixed and mobile allocations adopted April 2011;
 - PN on alternative 2GHz band plans, May 2011
 - 2GHz service rules NPRM and NOI, March 2012
- August 2010: NPRM and NOI on increased efficiency for backhaul spectrum below 13 GHz
 - Report and Order, FNPRM, August 2011

Commission Actions

- September 2010, Order finalized TV White Spaces
 - January 2011, PN released on database administration
 - April 2012 MOO adopting minor updates to rules
 - 1Q 2012, Two database administrators approved
 - Devices approved for trials in North Carolina and Virginia
- November 2010: NPRM on TV spectrum
 - February 2012, Legislation passed granting Incentive Auction authority to FCC
 - April 2012, Channel Sharing NPRM
- November 2010: NPRM on Experimental Licensing and NOI on Dynamic Spectrum Access

NTIA Actions

- October 2010, Long Term Plan and Timetable released
 - Plan and Timetable to identify/make available 500 MHz of spectrum in ten years
- October 2010, Assessment of Near-Term Viability of Accommodating Wireless Broadband Systems
 - Candidate bands identified that could be made available within 5 years
 - March 2011, FCC PN Seeking Comment on Fast Track Bands
- March 2012, Assessment of the Viability of Accommodating Wireless Broadband in the 1755 – 1850 MHz Band
 - Ongoing dialogue between government and industry

Items of Interest

- MBANS Report and Order (ET 08-59)
 - Service rules for indoor use of medical body area networks in 2.3 GHz band
 - Scheduled for May Agenda Meeting
- 76-77 GHz Radar Report and Order (ET 11-90, ET 10-28)
 - Addresses Vehicle and Fixed radar use
 - NTIA Coordination Completed
- Tank Level Probing Radar (TLPR), NPRM and Order Released January 2010
 - FNPRM released March 2012 seeking comment on operation of LPR devices installed in both open air environments and inside storage tanks
 - frequency bands: 5.925-7.250 GHz, 24.05-29.00 GHz, and 75-85 GHz
- Qualcomm Air to Ground Petition
 - Proposes secondary use of 14-14.5 GHz for one or more Air to Ground systems
 - PN seeking additional comment, May 2012, comments due May 30, 2012
 - AMSS service rules NPRM, February 2005

Items of Interest

- WRC Implementation conducted in two stages
 - July 2010, Table Clean-up Order Released
 - WRC-07 Implementation NPRM, pending
 - WRC-12 Implementation, discussions with NTIA
- WRC-15 Preparation
 - FCC WRC-15 Advisory Committee (WAC)
 - Charter extended, Website: www.fcc.gov/IB

FCC Online Table

FCC Contact: Tom Mooring, (202) 418-2450

- The FCC Online Table and the FCC Allocation History File: www.fcc.gov/oet/spectrum
 - Updated shortly after a final rule has been released that amends Section 2.106 of the Commission's Rules
 - More up-to-date than the print version, which is revised as of October 1st

How can CORF help?

- Stay engaged
 - By monitoring and commenting in FCC rulemakings
- Participate in WRC implementation
 - Through IRAC Scientific Community Spokesperson
- Review registration process for radio observatories (47 CFR § 2.107) as necessary
 - And consider technical and operational measures that could improve frequency sharing